

WHAT IS CLAIMED IS:

1. A computer system comprising:

a switch operable to communicatively couple a plurality of devices, wherein the switch is operable to receive a module, wherein the module comprises one or more module routing components operable to communicatively couple with the devices when the module is received by the switch.

2. The computer system of claim 1, wherein the switch further comprises one or more intermediate routing components operable to communicatively couple with the module routing components when the module is received by the switch.

3. The computer system of claim 2, wherein the module routing components are the same type as the intermediate routing components.

4. The computer system of claim 2, wherein the intermediate routing components and module routing components are ASIC-based routing components.

5. The computer system of claim 2, wherein the number of module routing components is equal to half the number of intermediate routing components.

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6. The computer system of claim 1, wherein the switch is operable to receive a plurality of modules.

7. A network switch operable to communicatively couple a plurality of devices attached to a computer network, wherein the network switch comprises a module interface operable to receive a module, wherein the module comprises one or more module routing components operable to communicatively couple with the devices when the module is received by the network switch.

8. The network switch of claim 7, further comprising one or more intermediate routing components operable to communicatively couple with the module routing components when the module is received by the network switch.

9. The network switch of claim 8, wherein the module routing components are the same type as the intermediate routing components.

10. The network switch of claim 8, wherein the intermediate routing components and module routing components are ASIC-based routing components.

11. The network switch of claim 8, wherein the number of module routing components is equal to half the number of intermediate routing components.

20 12. The network switch of claim 7, wherein the network switch comprises a plurality of module interfaces.

13. A module operable to be received by a network switch operable to communicatively couple a plurality of devices attached to a computer network, wherein the module comprises one or more module routing components operable to communicatively couple with the devices when the module is received by the network switch.

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14. The module of claim 13, wherein the network switch further comprises one or more intermediate routing components operable to communicatively couple with the module routing components when the module is received by the network switch.

10 15. The module of claim 14, wherein the module routing components are the same type as the intermediate routing components.

16. The module of claim 14, wherein the intermediate routing components and module routing components are ASIC-based routing components.

15 17. The module of claim 14, wherein the number of module routing components is equal to half the number of intermediate routing components.

20 18. The module of claim 13, wherein the network switch is operable to receive a plurality of modules.

19. A method for upgrading the bisectional bandwidth of a network comprising a plurality of devices, comprising the steps of:

providing a network switch operable to communicatively couple the devices attached to the network, wherein the network switch comprises a module interface operable to receive a module;

5 providing a module comprising one or more module routing components operable to communicatively couple with the devices when the module is received by the network switch; and

receiving the module.

10 20. The method of claim 19, wherein the network switch further comprises one or more intermediate routing components operable to communicatively couple with the module routing components when the module is received by the network switch.

15 21. The method of claim 20, wherein the module routing components are the same type as the intermediate routing components.

22. The method of claim 20, wherein the intermediate routing components and module routing components are ASIC-based routing components.

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23. The method of claim 20, wherein the number of module routing components is equal to half the number of intermediate routing components.

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24. The method of claim 19, wherein the network switch is operable to receive a plurality of modules.